April 29, 1966

#### Preliminary Program

### LENS DESIGN WITH LARGE COMPUTERS

July 5-8, 1966

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The program as given below includes the names of people who have indicated that they intend to present papers, but from whom no title or abstract has been received. In addition, inquiries have been received from both Russian and Polish designers whose plans are not yet firm. Some papers will probably be added later. A final program with abstracts will be issued early in June. The proposed panel discussions seem to have vanished.

To avoid the necessity of travel on July 4, there will be no meetings until the evening of July 5.

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The meeting	s will be held at the	ST
	Be sure to return the	
	rd to the Sheraton it you want a room. Bring a	
bathing suit; th	e Sheraton has a pool.	
Registratio	n fee for the conference is \$20. This includes	
	d reception at on Wednesday evening	S
	at the Sheraton Thursday evening.	O
we've heard noth	m is being sent to a number of people from whom ing. The final program will be sent only to those ed so far or who write asking for it.	
TUESDAY, JULY 5		
2:00 - 8:00	Registration, Sheraton Hotel and Motor Inn	
2:00 - 5:00	Open House,	S
Evening Program	Sheraton Hotel and Motor Inn	
8:00	WELCOMING REMARKS	٥.
		S
	TONG DESTROY DESTROY AND THE TREME OF OPENS	
8:10	LENS DESIGN RESEARCH AT THE INSTITUTE OF OPTICS	٥.
		S
9:00	EIGHT YEARS OF LENS DESIGNING WITH LARGE COMPUTERS	
		S

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	WEDNESDAY, JULY Morning Session	6	
	9:00	Title to be received	STAT
	9:45		STAT
	10:00	ODDS AND ENDS FROM A GREY BOX	STAT
	10:00	THE SEMI-AUTOMATIC GENERATION OF OPTICAL PROTOTYPES	SIAI
	Intermission, 10	0:40 - 11:00	
STAT	11:00	DOUBLE-GAUSS SYSTEMS	
	11:25	COMMERCIALLY AVAILABLE LENS DESIGN PROGRAMS	STAT
	Afternoon Sessio		
	2:00	THE USE OF DIFFRACTION-BASED CRITERIA OF IMAGE QUALITY IN AUTOMATIC OPTICAL DESIGN	STAT
	3:00	THE CERCO PROGRAM FOR AN AUTOMATIC LENS DESIGN	STAT
	Intermission, 3:	40 - 4:00	
	4:00	SEMI-AUTOMATIC LENS DESIGN ON A LARGE COMPUTER	STAT
STAT	4:30	CONSTRUCTION OF THE MERIT FUNCTION IN AUTOMATIC LENS DESIGN	

#### Evening Program George Eastman House and Museum of Photography 8:00 Film Show Films of historical and technological interest, especially selected from the STAT archives. 9:00 Reception Exhibits of the Museum of Photography will be open to visitors during the reception. Displays include early-model cameras and print-making methods, optical demonstrations, and galleries of photographs as art. THURSDAY, JULY 7 Morning Session STAT 9:00 THE 'LEAD' PROGRAM STAT 9:40 EXPERIENCE WITH THE 'LEAD' PROGRAM STAT 10:00 A COST VS. APERTURE STUDY OF A FAMILY OF LENSES Intermission, 10:15 - 10:35 STAT 10:35 AN EVOLUTIONARY APPROACH TO AUTOMATIC LENS DESIGN STAT 11:00 EXPERIENCE WITH 'ORDEALS' STAT

FUNCTION

A SIMPLE PRESENTATION OF THE OPTICAL TRANSFER

11:20

Afternoon Sess	ion	
2:00		STAT
	MODERN MATRIX TECHNIQUES FOR THE DESIGN OF OPTICAL SYSTEMS	•
2:20		STAT
	ON THE TOLERANCING OF OPTICAL SYSTEMS	
2:35	],	STAT
	PRODUCTION TOLERANCES	
2:50		STAT
	TREATMENT OF SINGULARITIES WHICH OCCUR IN THE LENS DESIGN PROBLEM	
3:00	· · ·	STAT
	Title to be received	
	little to be received	
Intermission,	3:10 - 3:30	
3:30		STAT
	Title to be received	
3:45		STAT
	THE ORTHOGONALIZATION OF ABERRATIONS	
Evening Program Sheraton Hotel		
6:00	Cocktails	
7:00	Banquet	
		STAT

	FRIDAY, JULY 8 Morning Session		
	9:00	ADAPTIVE AUTOMATIC CORRECTION	STAT
STAT	9:20	COMPARISON OF THE DAMPED LEAST SQUARES METHOD AND THE ADAPTIVE METHOD OF GLATZEL	
	10:00		STAT
		Title to be received	
	Intermission, 10	):30 - 10:50	
	10:50	DESIGN OF SPECTROGRAPHIC OPTICS ON IBM 7094	STAT
	11:20		STAT
		IMPROVEMENT OF THE HELIAR	
	11:30		STAT
		Title to be announced	
	Afternoon Session		
	2:00	A LENS DESIGN METHOD USING A QUADRATIC PROGRAMMING TECHNIQUE	STAT
STAT	2:25	A COMPARISON OF COMPUTERS FOR LENS DESIGN	
	2 <b>:</b> 35	ON THE MERIT FUNCTION FOR AUTOMATIC ROUGH DESIGN BASED ON THE ABERRATION THEORY	STAT
	2:50		STAT
	3:05	Title to be received  AN EFFICIENT AUTOMATIC LENS DESIGN PROGRAM FOR THE 7094	STAT

Intermission, 3:20 - 3:40

3:40

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50:1 ZOOM PROJECTION LENS

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3:55

Title to be received